

Form PTO-1449  
(REV. 8-83)



U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

COPY OF PAPERS  
ORIGINALLY FILED

INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

RECEIVED

U. S. PATENT DOCUMENTS

FEB 20 2002

TECH CENTER 1600/2900

Examiner's Initials	U.S. Patent No.	Applicant	Issue Date	Class	Subclass
	* 4,318,904	Shaw <i>et al.</i>	March 9, 1982	424	177
	* 4,443,609	Oude Alink <i>et al.</i>	April 17, 1984	548	111
	* 4,499,082	Shenvi <i>et al.</i>	February 12, 1985	514	2
	* 4,582,821	Kettner <i>et al.</i>	April 15, 1986	514	18
	* 4,636,492	Kettner <i>et al.</i>	January 13, 1987	514	18
	* 4,644,055	Kettner <i>et al.</i>	February 17, 1987	530	330
	* 4,652,552	Kettner <i>et al.</i>	March 24, 1987	514	18
	* 4,935,493	Bachovchin <i>et al.</i>	June 19, 1990	530	331
	* 4,963,655	Kinder <i>et al.</i>	October 16, 1990	530	331
	* 5,093,477	Mölling <i>et al.</i>	March 3, 1992	530	328
	* 5,187,157	Kettner <i>et al.</i>	February 16, 1993	514	18
	* 5,215,926	Etchells, III <i>et al.</i>	June 1, 1993	436	501
	* 5,242,904	Kettner <i>et al.</i>	September 7, 1993	514	18
	* 5,250,720	Kettner <i>et al.</i>	October 5, 1993	558	288
	* 5,288,707	Metternich	February 22, 1994	514	19
	* 5,296,604	Hanko <i>et al.</i>	March 22, 1994	546	169
	* 5,329,028	Ashkenazi <i>et al.</i>	July 12, 1994	548	548
	* 5,378,624	Berenson <i>et al.</i>	January 3, 1995	435	239
	* 5,384,410	Kettner <i>et al.</i>	January 24, 1995	548	405
	* 5,444,049	de Nanteuil <i>et al.</i>	August 22, 1995	514	18
	* 5,462,928	Bachovchin <i>et al.</i>	October 31, 1995	514	19

Form PTO-1449  
(REV. 8-83)U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket:  
2002941-0053In re Application No.  
09/289,321INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)

Applicant: Bachovchin

Filing Date:  
April 9, 1999Group:  
1653

	* 5,506,130	Peterson <i>et al.</i>	April 9, 1996	435	240.1
	* 5,527,923	Klinger <i>et al.</i>	June 18, 1996	548	570
	* 5,543,396	Powers <i>et al.</i>	August 6, 1996	514	19
	* 5,554,728	Basava <i>et al.</i>	September 10, 1996	530	327
	* 5,635,386	Palsson <i>et al.</i>	June 3, 1997	435	372
	* 5,635,387	Fei <i>et al.</i>	June 3, 1997	435	378
	* 5,646,043	Emerson <i>et al.</i>	July 8, 1997	435	373

## FOREIGN PATENT DOCUMENTS

Examiner's Initials	Document No.	Country	Date	Translation	
				Yes	No
	DD158109	Germany	29 December 1982		X
	DD270382A1	Germany	26 July 1989		X
	DD296075A5	Germany	21 November 1991		X
	EP 0356223A2	Europe	28 February 1990	X	
	EP 0371467A2	Europe	6 June 1990		X
	* EP 0420913B1	Europe	15 November 1995		
	* EP 0471651A2	Europe	19 February 1992		
	EP 0481311A2	Europe	22 April 1992		X
	EP 0615978A1	Europe	21 September 1994		X
	EP 0688788A1	Europe	27 December 1995		X
	* WO 89/03223	PCT	20 April 1989		
	* WO 91/16339	PCT	31 October 1991		
	* WO 91/17767	PCT	28 November 1991		

Form PTO-1449  
(REV. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

**INFORMATION  
DISCLOSURE STATEMENT**

*(Use several sheets if necessary)*



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

	* WO 92/12140	PCT	23 July 1992		
	* WO 92/17490	PCT	15 October 1992		
	* WO 93/02057	PCT	4 February 1993		
	* WO 93/05011	PCT	18 March 1993		
	* WO 93/08259	PCT	29 April 1993		
	* WO 93/10127	PCT	27 May 1993		
	* WO 93/16102	PCT	19 August 1993		
	* WO 94/03055	PCT	17 February 1994		
	* WO 94/09132	PCT	28 April 1994		
	* WO 94/20526	PCT	15 September 1994		
	* WO 94/25873	PCT	10 November 1994		
	* WO 94/28915	PCT	22 December 1994		
	* WO 94/29335	PCT	22 December 1994		
	* WO95/11689	PCT	4 May 1995		
	WO95/15309	PCT	6 June 1995	X	
	* WO 95/15309	PCT	8 June 1995		
	* WO 95/12618	PCT	11 May 1995		
	* WO 95/29190	PCT	2 November 1995		
	* WO 95/29691	PCT	9 November 1995		
	* WO 95/34538	PCT	21 December 1995		
	* WO 96/40858	PCT	19 December 1996		
	* WO 96/40263	PCT	19 December 1996		
	WO 98/00439	PCT	8 January 1998	X	
	WO 98/50046	PCT	12 November 1998	X	
	WO 98/50066	PCT	12 November 1998	X	

Form PTO-1449  
(REV. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

**INFORMATION  
DISCLOSURE STATEMENT**

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

**RECEIVED**

WO 99/16864

PCT

8 April 1999

X FEB 20 2002

**Examiner's  
Initials**

**OTHER DOCUMENTS  
(Including Author, Title, Date, Pertinent Pages, Etc.)**

TECH CENTER 1600 2900

Aguila, H.L., et al., "From Stem Cells To Lymphocytes: Biology and Transplantation", *Immun. Rev.*, **157**:13-40, (1997)

Ansorge, et al., "CD26/Dipeptidyl Peptidase IV in Lymphocyte Growth Regulation", 127-140.

\* Austin, D.J., et al., "Proximity Versus Allostery; The Role of Regulated Protein Dimerization in Biology", *Chemistry & Biology*, **1**:131-136, (1994)

\* Bachovchin, W.W., et al., "Inhibition Of IGA 1 Proteinases From Neisseria Gonorrhoeae And Hemophilus Influenzae By Peptide Prolyl Boronic Acids", *J. Biol. Chem.*, **265**:3738-3743 (1990).

\* Bailey, P.D., "An Introduction To Peptide Chemistry", *Wiley Publishers*, 1-81, (1990)

\* Barton, R.W.J., et al., "Binding Of The T Cell Activation Monoclonal Antibody Ta1 To Dipeptidyl Peptidase IV", *J. Leukocyte Biology*, **48**:291-296 (1990).

Baugh, R., et al., "Role and Potential Therapeutic Value of Proteinase Inhibitors in Tissue Destruction", *Proteinases And Tumor Invation*, **165**:157-180 (1980).

\* Blumenstein, et al., "Synthetic Non-Peptide Inhibitors of HIV Protease" *Biochemical and Biophysical Research Communications* **163**(2): 980-87, 1989.

\* Bodanszky, M., "Principles Of Peptide Synthesis", *Springer-Verlag*, **16**: (1984)

\* Bodanszky, M., "The Practice Of Peptide Synthesis", *Springer-Verlag*, **21**: (1984)

\* Bodanzky, M., "Peptide Chemistry, A Practical Textbook", *Springer-Verlag*, (1988) 1-9.

\* Boros, L.G., et al., "Fluoroolefin Peptide Isosteres-Tools For Controlling Peptide Conformations", *Tetrahedron Letters*, **35**:6033-6036., (1994)

\* Brady, L., and Dodson, G., "Reflections On A Peptide", *Nature*, **368**:692-693, (1994)

\* Brander, et al., "Heterogeneous T Cell Responses to  $\beta$ -Lactam-Modified Self-Structures Are Observed in Penicillin-Allergic Individuals" *J. Immunol.* **155** (5):2670-2678 (1995).

\* Brenchley, et al., "Towards Defining Antigens in Human Membranous Nephropathy" *Nephrology, Dialysis, Transplantation* **7** Supp. 1: 21-24, (1992).

Bristol, L.A., et al., "Characterization Of A Novel Rat Thymocyte Costimulating Antigen By The Monoclonal Antibody 1.3", *J. Immunol.*, **148**:332-338 (1992).

\* Bristol, L.A., et al., "Thymocyte Costimulating Antigen is CD26 (Dipeptidyl-Peptidase IV), Co-stimulation Of Granulocyte, Macrophage, T Lineage Cell Proliferation Via CD26," *J. Immunol.*, **149**:367-372 (1992).

Bristol, et al., "Inhibition of CD26 Enzyme Activity with Pro-boropro Stimulates Rat Granulocyte/Macrophage Colony Formation and Thymocyte Proliferation In Vitro", *Blood*, **85**(12): 3602-3609, 1995.

Form PTO-1449  
(REV. 8-83)

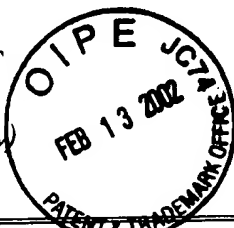
U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group  
1653

RECEIVED  
FEB 20 2002

TECH CENTER 1600/2900

- \* Bungy, et al., "Mapping of T Cell Epitopes of the Major Fraction of Rye Grass Using Peripheral Blood Mononuclear Cells From Atopics and Non-Atopics. II. Isoallergen Clone 5A of Lolium Perenne Group I (Lol p I). *Eur. J. Immunol.* **24** (9):2098-2103 (1994).
- \* Chan, et al., "*Archives of Ophthalmology* **113** (5):597-600 (1995).
- \* Chazenblak, et al., "Human Organ-Specific Autoimmune Disease", Molecular Cloning and Expression of an Autoantibody Gene Repertoire For a Major Autoantigen Reveals an Antigenic Immunodominant Region and Restricted Immunoglobulin Gene Usage in the Target Organ, *J. Clinical Investigation* **92** (1):62-74 (1993).
- \* Colowick, S., et al., "Methods In Enzymology", Pp. 220-225.
- \* Cordes, E., et al., "Transition States For Hydrolysis Of Acetals, Ketals Glycosides, And Glycosylamines", Chapter 11, Pp. 429-465
- \* Coutts, et al., "Structure-Activity Relationships of Boronic Acid Inhibitors of Dipeptidyl Peptidase IV. 1. Variation of the P<sub>2</sub> Position of X<sub>aa</sub>-boroPro Dipeptides", *J. Med. Chem.*, **39**: 2087-94, 1996.
- \* Dang, N.H., et al., "Cell Surface Modulation of CD26 By Anti-1F7 Monoclonal Antibody: Analysis Of Surface Expression And Human T Cell Activation", *J. Immunol.*, **145**:3963-3971 (1990).
- \* Darcy, et al., "Protection of Mice and Nude Rats Against Toxolasmosis by A Multiple Antigenic Peptide Construction Derived From Toxoplasma Gondii P30 Antigen", *J. Immunol.* **149** (11):3636-3641 (1992).
- \* Darmoul, D., et al. "Dipeptidyl Peptidase IV (CD26) Gene Expression in Enterocyte-like Colon Cancer Cell Lines HT-29 And Caco-2; Cloning Of The Complete Human Coding Sequence And Changes of Dipeptidyl Peptidase IV mRNA Levels During Cell Differentiation," *J. Biological Chemistry*, **267**:220-2208 (1992).
- \* Daw, et al., "Glutamic Acid Decarboxylase Autoantibodies in Stiff-Man Syndrome and Insulin-Dependent Diabetes Mellitus Exhibit Similarities and Differences in Epitope Recognition", *J. Immunol.* **156** (2): 818-825 (1996).
- \* De Caestecker, M.P., et al., "The Detection Of Intercytoplasmic Interleukin 1 (Alpha) Expression In Human Monocytes Using Two Colour Immunofluorescence Flow Cytometry", *J. Immunol. Methods* **154**:11-20 (1992).
- \* Demuth, H.U., et al. "Design Of (Omega-N-(O-Acyl)Hydroxy Amid) Aminodicarboxylic Acid Pyrrolidides As Potent Inhibitors Of Proline-Specific Peptidases", *FEBS Lett.*, **320**:23-27, (1993)
- \* Dudler, et al., "Carbohydrate-Dependent, HLA Class II-Restricted, Human T Cell Response to the Bee Venom Allergen Phospholipase A2 in Allergic Patients", *Eur. J. Immunol.* **25** (2):538-542 (1995).
- \* Duke-Cohan, J.S., et al., "Targeting Of An Activated T-Cell Subset Using A Bispecific Antibody-Toxin Conjugated Directed Against CD4 AND CD26", *Blood*, **82**:2224-2234., (1993).

Form PTO-1449  
(REV. 8-83)

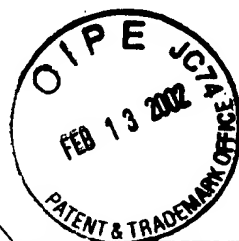
U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

**INFORMATION  
DISCLOSURE STATEMENT**

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

Dupont, B., "Immunology Of Hematopoietic Stem Cell Transplantation: A Brief Review Of Its History", *Immun. Rev.*, **157**:5-12. (1997)

\* Ebenbichler, C., et al., "Structure-function Relationships Of The HIV-1 Envelope V3 Loop Tropism Determinant: Evidence For Two Distinct Conformations", *Aids* **7**:639-46 (1993).

\* El Far, et al., "Antigens Associated with N- and L-Type Calcium Channels in Lambert - Eaton Myasthenic Syndrome", *J. Neurochemistry*, **64** (4): 1696-1702 (1995).

\* Fauci, A.S., "The Human Immunodeficiency Virus: Infectivity And Mechanisms Of Pathogenesis", *Science*, **239**:617-722 (1988).

\* Fleisher, B., et al., "Triggering of Cytotoxic T Lymphocytes and NK Cells Via The Tp 103 Pathway is Dependent On the Expression Of The T Cell Receptor/CD3 Complex", *J. Immuno.*, **141**:1103-1107.

\* Flentke, G.R., et al., "Inhibition Of Dipeptidyl Aminopeptidase IV (DP-IV) By XAA-Boropro Dipetides And Use Of These Inhibitors To Examine The Role Of DP-IV IN T-Cell Function", *Proc. Natl. Acad. Sci. USA*, **88**:1556-1559, (1991)

\* Freeman, et al., "T and B Cell Reactivity to Adrenal Antigens in Autoimmune Addison's Disease" *Clinical & Experimental Immunology* **88** (2): 275-279 (1992)

Goodman, et al., "Cellular Immunity to Cartilage Aggrecan Core Protein in Patients with Rheumatoid Arthritis and Non-Arthritic Controls", *Annals of the Rheumatic Diseases*, **55**: 40-46, 1996.

\* Goodman, M., and Chorev, M., "On The Concept Of Linear Modified Retro-Peptide Structures", *Accounts of Chemical Research*, **12**:1-7 (1979)

Goodstone, et al., "Cellular Immunity to Cartilage Aggrecan Core Protein in Patients with Rheumatoid Arthritis and Non-Arthritic Controls" *Annals Of The Rheumatic Diseases* **55**(1):40-46 (1996).

\* Guichard, G., et al. "Partially Modified Retro-Inverso Pseudopeptides As Non-Natural Ligands For The Human Class I Histocompatibility Molecule HLA-A2, *J. Med. Chem.*, **39**:2030-2039, (1996)

\* Günther, U.L., et al., "Solution Structures Of The DP IV (CD26) Inhibitor Val-BoroPro Determined By NMR Spectroscopy", *Magnetic Resonance in Chem.*, **33**:959-970, (1995)

Gutheil, W.G., et al., "Separation Of L-PRO-DL-Boropro Into Its Component Diastereomers And Kinetic Analysis Of Their Inhibition Of Dipeptidyl Peptidase IV. A New Method For The Analysis Of Slow, Tight-Binding Inhibition", *Biochemistry*, **32**:8723-8731, (1993)

\* Hall, et al., "Immunogenetics of Dermatitis Herpetiformis", *Seminars in Dermatology*, **10**(3):240-245 (1991).

\* Hart, et al., "Design of Experimental Synthetic Peptide Immunogens for Prevention of HIV-1 and HTLV-1 Retroviral Infections", *Pharmaceutical Biotechnology* **6**:821-845 (1995).

\* Hegen, M., et al. "Enzymatic Activity Of CD26 (Dipeptidylpeptidase IV) Is Not Required For Its Signalling Function In T Cells", *Immunobiology*, **189**:483-493, (1993)

\* Hegen, M., et al. "Function Of Dipeptidylpeptidase IV (CD26, TP103) In Transfected Human T Cells", *Cell Immunol.*, **146**:249-260, (1993)

Form PTO-1449  
(REV. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

RECEIVED  
FEB 20 2002  
TECH CENTER 1600/29

	* Hegen, M., et al., "The T Cell Triggering Molecule Tp 103, <i>J. Immunol.</i> , <b>144</b> :2980-2914 (1990).
	* Heins, J., et al., "Mechanism of Proline-Specific Proteinases: (I) Substrate Specificity of Dipeptidyl Peptidase IV From Pig Kidney and Proline-Specific Endopeptidase From <i>Flavobacterium Meningosepticum</i> ", <i>Biochimica Biophysica Acta</i> , <b>954</b> :161-169 (1988).
	* Ikagawa, et al., "Single Amino and Acid Substitutions on a Japanese Cedar Pollen Allergen Cry J-1) Derived Peptide Induced Alterations in Human T Cell Responses and T Cell Receptor Antagonism" <i>J. Allergy &amp; Clinical Immunol.</i> <b>97</b> (1 Pt 1): 53-64 (1996).
	* James, et al., "Peptide Autoantigenicity of the Small Nuclear Ribonucleoprotein C" <i>Clinical &amp; Experimental Rheumatology</i> , <b>13</b> (3):299-305 (1995).
	* Jameson, B.A., et al., "A Rationally Designed CD4 Analogue Inhibits Experimental Allergic Encephalomyelitis", <i>Nature</i> , <b>368</b> :744-746, (1994).
	* Janeway, C., et al., "Immunobiology - The Immune System In Health And Disease", <i>Current Biology LTD</i> , Chapter 12, pp. 1-35, (1994).
	* Jardetzky, T.S., et al., "Three-Dimensional Structure Of A Human Class II Histocompatibility Molecule Complexed With Superantigen, <i>Nature</i> , <b>368</b> :711-718 (1994)
	* Jiang, et al., "Inhibition of Human Immunodeficiency Virus Type I Infection in a T-Cell Line (CEM) by New Dipeptidyl-Peptidase IV (CD26) Inhibitors", <i>Res Viral</i> , <b>148</b> : 255-266, 1997.
	* Jorgensen, J.L., et al., "Molecular Components Of T-Cell Recognition," <i>Annu. Rev. Immunol.</i> <b>10</b> :835-873 (1992).
	* Kalluri, et al., "Identification of the Alpha 3 Chain of Type IV Collagen as the Common Autoantigen in Antibasement Membrane Disease and Goodpasture Syndrome", <i>J. The American Society Of Nephrology</i> <b>6</b> (4):1178-1185 (1995).
	* Kameoka, J., et al., "Direct Association Of Adenosine Deaminase With A T Cell Activation Antigen, CD26", <i>Science</i> , <b>261</b> :466-469, (1993)
	* Kameoka, Jr., et al., "Differential CD26-Mediated Activation Of The CD3 AND CD2 Pathways After CD6-Depleted Allogeneic Bone Marrow Transplantation", <i>Blood</i> <b>85</b> :1132-1137, (1995)
	* Karges, et al., "Self and Non-Self Antigen in Diabetic Autoimmunity: Molecules and Mechanisms", <i>Molecular Aspects Of Medicine</i> <b>16</b> (2):29-213 (1995).
	* Kelly, T.A., et al., "Immunosuppressive Boronic Acid Dipeptides: Correlation Between Conformation And Activity", <i>J. Am. Chem. Soc.</i> , <b>115</b> :12637-12638, (1993)
	* Kelly, T.A., et al., "The Efficient Synthesis And Simple Resolution Of A Proline Boronate Ester Suitable For Enzyme Inhibition Studies", <i>Tetrahedron</i> <b>49</b> :1009-1016 (1993).
	* Kettner, C.A. and Shenvi, A.B., "Peptide Boronic Acid Inhibitors Of Trypsin-Like Proteases Their Preparation And Use As Anticoagulants And Inflammation Inhibitors", <i>Chemical Abstracts</i> , (1990), 112:80 (91790c).
	* Kettner, C.A., et al., "Kinetic Properties Of The Binding Of Alpha-Lytic Protease To Peptide Boronic Acids", <i>Biochemistry</i> , <b>27</b> :7682-7688, (1988).

Form PTO-1449  
(REV. 8-83)U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket:  
2002941-0053In re Application No.  
09/289,321INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999Group:  
1653

\* Kinder, D., et al., "Analogues of Carbamyl Aspartate as Inhibitors..." *J. Med. Chem.*, 33:819-823 (1990).

\* Kokowa, et al., "Detection of Platelet Antigen for Antiplatelet Antibodies in Idiopathic Thrombocytopenic Purpura by Flow Cytometry, Antigen-Capture ELISA, and Immunoblotting: A Comparative Study", *Eur. J. Hematology* 50 (2): 74-80 (1993)

\* Kubota, T., et al., "Dipeptidyl peptidase IV (DP IV) Activity In Serum and On Lymymphocytes Of Mrl/Mp-lpr/lpr Mice Correlates With Disease Onset", *Clin. Exp. Immunol.*, 96:292-296. (1994).

\* Kubota, T., et al., "Involvement Of Dipeptidyl Peptidase IV In An In Vivo Immune Response", *Clin. Exp. Immunol.*, 89:192-197, (1992).

\* Kuchroo, V.K., et al., "A Single TCR Antagonist Peptide Inhibits Experimental Allergic Encephalomyelitis Mediated By A Diverse T Cell Repertoire", *J. Immunol.* 153:3326-3336 (1994).

\* Kuchroo, V.K., et al., "Cytokines And Adhesion Molecules Contribute To The Ability of Myelin Proteolipid Protein-Specific T Cell Clones To Mediate Experimental Allergic Encephalomyelitis", *J. Immunol.* 151:4371-4382 (1993).

\* Kuchroo, V.K., et al., "Experimental Allergic Encephalomyelitis Medicated By Cloned T Cells Specific For A Synthetic Peptide of Myelin Proteolipid Protein. Fine Specificity And T Cell Receptor V Beta Usage", *J. Immunol.* 148:3776-3782 (1992).

\* Kuchroo, V.K., et al., "Induction Of Experimental Allergic Encephalomyelitis By Myelin Proteolipid-Protein-Specific T Cell Clones and Synthetic Peptides", *Pathobiology* 59:305-312 (1991).

\* Kuchroo, V.K., et al., "T Cell Receptor (TCR) Usage Determines Disease Susceptibility In Experimental Autoimmune Encephalomyelitis: Studies with TCR V Beta \*.2 Transgenic Mice", *J. Experimental Medicine* 179:1659-1664 (1994).

\* Kuchroo, V.K., et al., "T-cell Receptor Alpha Chain Plays a Critical Role in Antigen-Specific Suppressor Cell Function", *Proc. Natl. Acad. Sci. USA* 88:8700-8704 (1991).

\* Linington, et al., "Cell Adhesion Molecules of the Immunoglobulin Supergene Family as Tissue-Specific Autoantigens: Induction of Experimental Allergic Meuritis (EAN) by PO Protein-Specific T Cell Lines", *Eur. J. Immunol.* 22 (7): 1813-1817 (1992).

\* Linsley, P.S., et al., "Effects of Anti-gp 120 Monoclonal Antibodies On CD4 Receptor Binding By The Env Protein Of Human Immunodeficiency Virus Type 1", *J. Virology* 62:3695-3702 (1988).

\* Liu, et al., "Molecular Mapping of a Pathogenically Relevant BP180 Epitope Associated with Experimentally Induced Murine Bullous Pemphigoid" *J. Immunol.* 155 (11): 5449-5454 (1995).

\* Lopez, et al., "Characterization of SPf(66)n: A Chimeric Molecule Used as a Malaria Vaccine" *Vaccine*, 12 (7):585-591 (1994).

Luftig, et al., "Update on Viral Pathogenesis", Recent Work on Three Human Pathogens Illustrates the Paths Being Taken in Viral Pathogenesis Research" *ASM News*, 56(7): 366-368, 1990.



Form PTO-1449  
(REV. 8-83)U.S. Department of Commerce  
Patent and Trademark OfficeAtty. Docket:  
2002941-0053In re Application No.  
09/289,321INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999Group:  
1653

- \* Marguett, et al., "cDNA Cloning for Mouse Thymocyte-Activating Molecule", A Multifunctional Ecto-Dipeptidyl Peptidase IV (CD26) Included in a Subgroup of Serine Proteases", *The Journal of Biological Chemistry*, **267**(4): 2200-2208, 1992.
- \* Matteson, D., et al., "Synthesis And Properties Of Pinanediol a-Amido Boronic Esters" *Organometallics*, **3**:1284-1288, (1984).
- \* Mittrucker, H.W., et al. "The Cytoplasmic Tail Of The T Cell Receptor Zeta Chain is Required For Signaling Via CD26", *Eur. J. Immunol.*, **25**:295-297. (1995)
- \* Morimoto, C., et al., 1F7 "A Novel Cell Surface Molecule, Involved in Helper Function Of CD4 cells". *J. Immunol.*, **143**:34030-3439 (1989) and published erratum appears in *J. Immunology* **144** (5):2027 (1990).
- \* Mosmann, T.R., "Cytokine Patterns During The Progression To Aids", *Science*, **265**:193-194, (1994).
- \* Mullins, et al., "Transgenesis in the Rat and Larger Mammals" *J. Clinical Investigation* **96** (1): 30-37 (1996).
- \* Nardelli, et al., "A Chemically Defined Synthetic Vaccine Model for HIV-1", *J. Immunol.* **148** (3): 914-920 (1992).
- \* Nicola, N, et al., "Guidebook To Cytokines And Their Receptors", *Sambrook and Tooze Publication*, Pp. 1-257, (1994).
- \* O'Brien, et al., "An Immunogenetic Analysis of the T-Cell Recognition of the Major House Dust Mite Allergen Der p2: Identification of High- and Low-Responder HLA-DQ Alleles and Localization of T-Cell Epitopes" *Immunology* **86** (2):176-182 (1995).
- \* Panina-Bordignon, P., et al., "Universally Immunogenic T Cell Epitopes: Promiscuous Binding To Human MHC MHC Class II And Promiscuous Recognition By T Cells", *Eur. J. Immunol.* **19**:2237-2242 (1989).
- \* Ostresh, et al., "Generation and Use of Nonsupport-Bound Peptide and Peptidomimetic Combinatorial Libraries", *Methods in Enzymology*, **267**: 220-234, 1996
- \* Perry, et al., "Autoreactive T Cell Specificity in Autoimmune Hemolytic Anemia of the NZB Mouse", *Eur. J. Immunol.* **26**(1): 136-141 (1996).
- \* Perstorp Biotech Company, "Molecular Biology Catalog", (1994)
- \* Powers, C., et al., "Elastase Inhibitors For Treatment Of Emphysema - NHLBI Workshop Summary" *US Dept. of Health and Human Services*, 1097-1100, (1985).
- \* Protti, et al., "Myasthenia Gravis: Recognition of a Human Autoantigen at the MolecularLevel" *Immunol. Today* **14** (7):363-368 (1993).
- Reinhold, D., et al., "Inhibitors of dipeptidyl peptidase IV (DP IV, CD26) induces secretion of transforming growth factor- 1 (TGF- 1) in stimulated mouse splenocytes and thymocytes" *Immunology Letters* , **58**:29-35, (1997).
- \* Reynolds, et al., "T and B Epitope Determination and Analysis of Multiple Antigenic Peptides for the Schistosoma Mansonii Experimental Vaccine Triose-Phosphate Isomerase", *J. Immunol.* **152** (1):193-200 (1994).

Form PTO-1449  
(REV. 8-83)

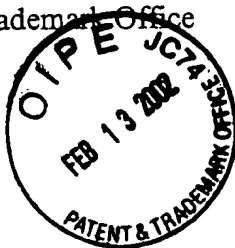
U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

**INFORMATION  
DISCLOSURE STATEMENT**

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

COPY OF PAPERS  
ORIGINALLY FILED

\* Rini, J.M., et al., "Crystal Structure Of A Human Immunodeficiency Virus Type 1 Neutralizing Antibody, 50.1, In Complex With Its V3 Loop Peptide Antigen", *Proc. Natl. Acad. Sci. USA* **90**:6325-9 (1993).

\* Ritu, et al., "Construction of Synthetic Immunogens: Use of T- and B-Cell Epitopes of CS and RESA Proteins of Plasmodium Falciparum" *Vaccine* **10** (11): 761-765 (1992).

\* Scharpe, S., et al., "Purified And Cell-Bound CD26: Enzymatic Inhibition, Antibody Binding Profile, And Expression On T Cells In Relation To Other Surface Markers", *Verh. K. Acad. Geneesk. Belg.*, **56**:537-559. (1994)

Schmitz T., et al., "Potentiation Of The Immune Response In Hiv-1 + Individuals", *J. Clin. Invest.*, **97**:1545-1549, (1996).

\* Schon, E., et al., "Dipeptidyl Peptidase IV in Human T Lymphocytes. An Approach To The Role Of A Membrane Peptidase In The Immune System", *Biomedica Biochimica Acta*, **45**:1523-1528 (1986).

\* Schon, E., et al., "Dipeptidyl Peptidase IV In The Immune System", *Biol. Chem. Hoppe-Seyler*, **372**:305-311, (1991).

\* Schön, E., et al., "Dipeptidyl Peptidase IV In The Immune System. Effects of Specific Enzyme Inhibitors On The Activity Of Dipeptidyl Peptidase IV And Proliferation Of Human Lymphocytes", *Biological Chemistry Hoppe Seyler* **372**:305-311 (1991).

\* Schon, E., et al., "The Dipeptidyl Peptidase IV, A Membrane Enzyme Involved In The Proliferation Lymphocytes", *Biomedica Biochimica Acta*, **44** (1985).

\* Schön, E., et al., "The Role Of Dipeptidyl Peptidase IV In Human T Lymphocyte Activation. Inhibitors And Antibodies Against Dipeptidyl Peptidase IV Suppress Lymphocyte Proliferation And Immunoglobulin Synthesis In Vitro", *Eur. J. Immunol.* **17**:1821-1826 (1987).

\* Seed, B., "Making Agonists Of Antagonists", *Chemistry & Biology*, **1**:125-129 (1994).

\* Shimojo, et al., "Identification of the Disease-Related T Cell Epitope of Ovalbumin and Epitope-Targeted T Cell Inactivation in Egg Allergy" *Int'l. Archives of Allergy & Immunol.* **105** (2):155-161 (1994).

\* Snow, R.J., et al., "Studies On Proline Boronic Acid Dipeptide Inhibitors Of Dipeptidyl Peptidase IV: Identification Of A Cyclic Species Containing A B-N Bond", *J. Am. Chem. Soc.*, **116**:10860-10869, (1994).

\* Songyang, Z., et al., "SH2 Domains Recognize Specific Phosphopeptide Sequences", *Cell*, **72**:767-778, (1993)

\* Subramanyam, M., et al., "CD26, AT-Cell Accessory Molecule Induction Of Antigen-Specific Immune-Suppression By Inactivation OF CD26: A Clue To The Aids Paradox?", in *Dipeptidyl Peptidase IV (CD26) in Metabolism and Immune Response*, Ed. B. Fleischer: 155-162, (1995)

\* Subramanyam, M., et al., "Mechanism Of Hiv-1 Tat Induced Inhibition Of Antigen-Specific T Cell Responsiveness", *J. Immunol.*, **150**:2544-2553, (1993)

Subramanyam, W.G., et al., "Mechanism of HIV-1 Tat Induced Inhibition Of Antigen-Specific T Cell Responsiveness", *J. Immunol.* **150**:2544-2553 (1993).

Form PTO-1449  
(REV. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group  
1653

RECEIVED

FEB 20 2002

TECH CENTER 1600/20

- \* Sudmeier, J.L., et al., "Solution Structures Of Active And Inactive Forms Of The DP IV (CD26) Inhibitor Pro-Boropro Determined By Nmr Spectroscopy", *Biochemistry*, **33**:12427-12438, (1994).
- \* Tam, J.P., "Synthetic Peptide Vaccine Design: Synthesis And Properties Of A High-Density Multiple Antigenic Peptide System", *Proc. Natl. Acad. Sci. USA*, **85**:5409-5413, (1988).
- \* Tanaka, T., et al. "Cloning And Functional Expression Of The T Cell Activation Antigen CD26", *J. Immunol.*, **149**:481-486. (1992)
- \* Tanaka, T., et al. "Cloning And Functional Expression Of The T Cell Activation Antigen CD26", *J. Immunol.* **149**: 481-486 (1992); published erratum appears in *J. Immunol.* **50**(5):2090 (1993).
- \* Tanaka, T., et al., "The Costimulatory Activity Of The CD26 Antigen Requires Dipeptidyl Peptidase IV Enzymatic Activity", *Proc. Natl. Acad. Sci. USA*, **90**:4586-4590. (1993)
- \* Thompson, R., "Use Of Peptide Aldehydes To Generate Transition-State Analogs Of Elastase", *Biochemistry*, **12**:1:47-51 (1973).
- Thompson, R. "Peptide Aldehydes: Potent Inhibitors of Serine and Cysteine Proteases", **19**: 220-225.
- \* Uibo, et al., "Characterization of Adrenal Autoantigens Recognized by Sera From Patients with Autoimmune Polyglandular Syndrome (APS) Type I. (*J. Autoimmunity* **7** (3): 399-411 (1994).
- \* Van Noort, et al., "The Small Heat-Shock Protein Alpha B-Crystallin as Candidate Autoantigen in Multiple Sclerosis" *Nature* **375** (6534):798-801 (, 2995).
- \* Watson, J.D., "Continuous Proliferation Of Murine Antigen Specific Helper T Lymphocytes in Culture", *J. Experimental Medicine* **150**:1510 (1979).
- \* Welch, J.T., and Lin J., "Fluoroolefin Containing Dipetide Isoteres As Inhibitors Of Dipeptidyl Peptidase IV (CD26), *Tetrahedron*, **52**:291-304, (1995).
- \* Wijdenes, et al., "Monoclonal Antibodies (mAb) Against gp130 Imitating Cytokines Which Use the gp130 For Signal Transduction", Abstract.
- \* Wyss-Coray, T., et al., "Use Of Antibody/Peptides Constructs Of Direct Antigenic Peptides To T Cells: Evidence For T Cells Processing And Presentation", *Cellular Immunol.*, **139** (1):268-73 (1992).
- \* Yoshimoto, T., et al., "Comparison Of Inhibitory Effects Of Proline-Containing peptide Derivates On Prolyl...", (1985) *J. Biochem.*, **98**:975-979, (1985)
- \* Zhu, X., et al., "T Cell Epitope Mapping of Ragweed Pollen Allergen Ambrosia Artemisiifolia (Amb a 5) and Ambrosia Trifida (Amb t 5) and the Role of Free Sulfhydryl Groups in T Cell Recognition" *J. Immunol.* **155** (10):5064-5073 (1995).
- \* Zimmerman, D.H., et al. "A New Approach To T-Cell Activation: Natural And Synthetic Conjugates Capable Of Activating T Cells", *Vaccine Res.*, **5**:91-102, (1996).
- Zimmerman, D.H., et al., "Immunization With Peptide Heteroconjugates Primes A T Helper Cell..." *Vaccine Res.* **5**:103-118, (1996).

Form PTO-1449  
(REV. 8-83)

U.S. Department of Commerce  
Patent and Trademark Office

Atty. Docket:  
2002941-0053

In re Application No.  
09/289,321

INFORMATION  
DISCLOSURE STATEMENT

(Use several sheets if necessary)



Applicant: Bachovchin

Filing Date:  
April 9, 1999

Group:  
1653

EXAMINER

*NOT Considered*

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

3184391\_1.DOC

COPY OF PAPERS  
ORIGINALLY FILED

RECEIVED

FEB 20 2002

TECH CENTER 1600/2000